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DATE MAILED: 12/10/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

20995 7590 12/10/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTFENTH FLOOR

IRVINE, CA 92614

EXAMINER

GAMETT, DANIEL C

ART UNIT PAPER NUMBER

1647

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,884	07/25/2003	Hans-Joerg Buehring	WWELL73.004AUS	3837
TITLE OF INVENTION: A	ANTIBODIES FOR IDENT	IFYING AND/OR ISOLATING AT LEAST ONE CELL PO	PULATION WHICH IS SI	ELECTED

FROM THE GROUP COMPRISING HAEMATOPOIETIC STEM CELLS, NEURONAL STEM CELLS, NEURONAL PRECURSOR CELLS, MESENCHYMAL STEM CELLS AND MESENCHYMAL PRECURSOR CELLS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/10/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	ed below or directed oth	or transmitting the ISS ing the Patent, advance of nerwise in Block 1, by (a) specifying a new corres	pondence address;	and/or	(b) indicating a sepa	hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDI	ENCE ADDRESS (Note: Use Bi	iock 1 for any change of address)	Feef	s) Transmittal. Thi	s certific	ate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
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2040 MAIN STE FOURTEENTH	FLOOR	& BEAR LLP	I her State addr trans	eby certify that the s Postal Service w essed to the Mail mitted to the USP.	tificate of is Fec(s) with suffi Stop IS FO (571)	of Mailing or Trans Transmittal is being cient postage for fire SSUE FEE address 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
IRVINE, CA 92	514						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/627,884	07/25/2003	•	Hans-Joerg Buehring		ww	ELL73.004AUS	3837
	COMPRISING HAEM	MATOPOIETIC STEM	R ISOLATING AT LEAS CELLS, NEURONAL S R CELLS				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	03/10/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
GAMETT,	DANIEL C	I647	424-141100				
1. Change of correspondence address or indication of "Fee Address" (3: CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTOVSB/122) attached. Tee Address indication for "Fee Address" Indication form PTOVSB/12 or more recent) attached. Use of a Custome Number is required.			2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm thaving as a member a registered attorney or agents and the names of up to 2 registered patent ancherny's or agents. If no name is listed, no name will be printed.				
	ess an assignee is ident h in 37 CFR 3.II. Comp		(B) RESIDENCE: (CITY	ntent. If an assign assignment. and STATE OR C	OUNTR	(Y)	ocument has been filed for
Please check the appropri	iate assignee category or	categories (will not be p	rinted on the patent):	Individual 🚨 Co	rporatio	n or other private gro	oup entity 🚨 Government
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by reofit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overspayment, to Deposit Account Number (enclose an extra copy of this form).				
	s SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no long	ger claiming SMAI	LENTI	TY status. Sec 37 Cl	FR 1.27(g)(2).
NOTE: The Issue Fee and interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademarl	ed from anyone other than t k Office.	ne applicant; a regi	stered at	torney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration N			
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var- rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est y depending upon the indiv the Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS	he public minutes t mments Tradema 5. SEND	which is to file (and o complete, includir on the amount of tir rk Office, U.S. Dep TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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FOURTEENTH FI	LOOR	1647			

FOURTEENTH FLOOR IRVINE, CA 92614

DATE MAILED: 12/10/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

 $(application \ filed \ on \ or \ after \ May \ 29, \ 2000)$

The Patent Term Adjustment to date is 440 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 440 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/627.884 BUEHRING ET AL. Notice of Allowability Examiner Art Unit DANIEL C. GAMETT 1647 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 08/22/2008. The allowed claim(s) is/are 1-5,7-10 and 18-35. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material □ Other . /David S Romeo/ Primary Examiner, Art Unit 1647

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EXAMINER'S AMENDMENT

1. Claims 1-5, 7-10, and 18-35 are currently pending and are present for examination.

- 2. Applicants' amendments and arguments filed on 08/22/2008 have been fully considered and are deemed to be persuasive to overcome the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.
- 3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- Authorization for this examiner's amendment was given in a telephone interview with Raymond Smith on December 1, 2008.

The application has been amended as follows:

In the claims-

- 1. Monoclonal antibody, for isolating and/or identifying at least one cell population which is selected from the group consisting of haematopoietic stem cells, neuronal stem cells, neuronal progenitor cells, mesenchymal stem cells and mesenchymal progenitor cells, wherein the antibody binds to an epitope of CUB domain-containing protein 1 (CDCP 1) which is the same as that bound by an antibody which is produced by the hybridoma cell lines CUB 1, CUB2, CUB3 or CUB4, which were deposited in the Deutsche Sammlung fur Mikroorganismen und Zellkulturen [German collection of microorganisms and cell cultures] (DSMZ), in accordance with the Budapest treaty, under the numbers DSM ACC2569, DSM ACC2566 and DSM ACC2565. on 14.08.2002, and DSM ACC2551. on 12.07.2002.
- 28. A fragment of the monoclonal antibody of Claim 2, wherein said fragment is selected from the group consisting of Fab, F(ab')2', Fv and a <u>fragment comprising</u> complementarydetermining regions (CDRs), and wherein said fragment retains antigen-binding specificity of said antibody.

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Art Unit: 1647

29. A fragment of the monoclonal antibody of Claim 3, wherein said fragment is selected from the group consisting of Fab, F(ab')2', Fv and a <u>fragment comprising</u> complementarydetermining regions_(CDRs), and wherein said fragment retains antigen-binding specificity of said antibody.

- 30. A fragment of the monoclonal antibody of Claim 4, wherein said fragment is selected from the group consisting of Fab, F(ab')2', Fv and a <u>fragment comprising</u> complementarydetermining regions (CDRs), and wherein said fragment retains antigen-binding specificity of said antibody.
- 31. A fragment of the monoclonal antibody of Claim 5, wherein said fragment is selected from the group consisting of Fab, F(ab')2', Fv and a <u>fragment comprising</u> complementarydetermining regions_(CDRs), and wherein said fragment retains antigen-binding specificity of said antibody.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel C. Gamett, PhD., whose telephone number is (571)272-1853. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath N. Rao can be reached on 571 272 0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. C. G./ Examiner, Art Unit 1647

/David S Romeo/ Primary Examiner, Art Unit 1647